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**Pacing during an elite Olympic distance triathlon: Comparison between male and female competitors.**

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This study investigated whether pacing differed between 68 male and 35 female triathletes competing over the same ITU World Cup course. Swimming, cycling and running velocities ( $\text{ms}^{-1}$  and  $\text{kmh}^{-1}$ ) were measured using a global positioning system (Garmin, UK), video analysis (Panasonic NV-MX300EG), and timing system (Datasport, Switzerland). The relationship between performance in each discipline and finishing position was determined. Speed over the first 222m of the swim was associated with position ( $r=-0.88$  in males,  $r=-0.97$  in females, both  $p<0.01$ ) and offset from the leader, at the swim finish ( $r=-0.42$  in males,  $r=-0.49$  in females, both  $p<0.01$ ). The latter affected which pack number was attained in bike lap 1 ( $r=0.81$  in males,  $r=0.93$  in females, both  $p<0.01$ ), bike finishing position (both  $r=0.41$ ,  $p<0.01$ ) and overall finishing position ( $r=0.39$  in males,  $r=0.47$  in females, both  $p<0.01$ ). Average biking speed, and both speed and pack attained in bike laps 1 and 2, influenced finishing position less in the males ( $r=-0.42$ ,  $-0.2$  and  $-0.42$ , respectively, versus  $r=-0.74$ ,  $-0.75$ , and  $-0.72$ , respectively, in the females, all  $p<0.01$ ). Average run speed correlated better with finishing position in males ( $r=-0.94$ ,  $p<0.01$ ) than females ( $r=-0.71$ ,  $p<0.001$ ). Both sexes ran faster over the first 993m than most other run sections but no clear benefit of this strategy was apparent. The extent to which the results reflect sex differences in field size and relative ability in each discipline remains unclear.